

REMARKS

Reconsideration and allowance of this application are respectfully requested. Claims 1-3 and 5-16 remain pending, wherein claims 17-34 were previously withdrawn and claim 4 previously cancelled. By this communication, claims 1 and 12-15 are amended. Support for the amended subject matter can be found, for example, at page 32, line 5 through page 34, line 12.

Rejection Under 35 U.S.C. §101

In numbered paragraph 7 on page 3 of the Office Action, claims 1-3 and 5-11 are rejected under 35 U.S.C. §101 for allegedly being directed to non-statutory subject matter. Applicants respectfully traverse this rejection.

The Examiner alleges that the claimed subject matter is non-statutory because claim 1 consists entirely of means language, which in light of the specification could consist entirely of software. However, based on the established patent practice as defined by the courts, Applicants believe that the means-language of the claims embodies tangible physical elements as described in the disclosure.

Figs. 1-9 illustrate exemplary embodiments of an internal structure of the communication adapter and describes in detail the various algorithms performed by the communication adapter and its various components to perform various operations. See Applicants' disclosure, pg. 30, line 3 through pg. 31, line 21. Fig. 10 is directed to an exemplary embodiment of a system that includes the communication adapter and illustrates the manner in which the communication adapter interacts with other system components, such as a home appliance. With respect to Fig. 10, the communication adaptor is described as having a CPU, input/output interfaces, a network interface, and a storage device. Id., pg. 55, lines 7

- 19. Thus, based on the above, one of ordinary skill would understand that the processes described in association with the components of the communication adapter shown in Figs. 1-9 are executed via the components illustrated in Fig. 10.

Moreover, with respect to Figs. 1-9 Applicants' disclosure

In WMS Gaming, Inc. v. International Game Technology, 184 F.3d 1339 (Fed. Cir. 1999), the Federal Circuit held that general purpose computer programmed to carry out a particular algorithm creates a "new machine" because a general purpose computer "in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software." Id., quoting In re Alappat, 33 F.3d 1526, 1545 (Fed. Cir. 1994). The instructions of the software program in effect "create a special purpose machine for carrying out the particular algorithm." WMS Gaming, 184 F.3d at 1348. Thus, in a means-plus-function claim "in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm." Id. at 1349.

In Harris Corp. v. Ericsson Inc., 417 F.3d 1241, 1253 (Fed. Cir. 2005), the court held that "the corresponding structure for a §112 ¶ 6 claim for a computer-implemented function is the algorithm disclosed in the specification." 417 F.3d at 1249.

Because Applicants' disclosure describes in detail the various functions performed by each component of the communication adapter, whose functions are implemented through a CPU, one of ordinary skill would find that the means language recited in claim 1 also embodies this same structure such that the claimed

embodiment cannot and does not "consist entirely of software" as alleged.

Therefore, withdrawal of this rejection is respectfully requested.

Rejections Under 35 U.S.C. §112

Claim 12-16 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for alleged indefiniteness. Applicants respectfully traverse this rejection.

On page 4 of the Office Action, the Examiner asserts that the claim term "the second input/output interface communicates data based on a corresponding input/output format" fails to define "what format the second interface corresponds to" and is therefore indefinite. Applicants disagree.

With respect to the corresponding input/output format of an input/output interface, Applicants' disclosure provides the following:

The communication adapter **32** includes input/output interfaces A **37** and B **33** for exchanging attribute information with the home appliance **38** , a network interface **35** for exchanging information with an electronic appliance **40** such as other home appliances and a personal computer via a network **39** such as Ethernet (registered trademark), a CPU **36** that exchanges information between the input/output interfaces A **37** and B **33** and the network interface **35** and processes this information, and a storage **34** that is applicable to input/output systems used in home appliances connected to the input/output interfaces A **37** and B **33** and in which driver software A and B for controlling hardware of the input/output interfaces is stored.

The input/output interfaces A and B are connectors of the same type. Formats corresponding to the input/output systems of the home appliances connected thereto are selected as formats of the input/output interfaces A and B. Here, for simplification of explanation, it is assumed that one of formats of serial input/output and contact input/output is selected.

FIG. 11 shows a state in which two home appliances **38** and **38'** with different input/output systems are connected to the communication adapter **32**. In the figure, input/output interfaces of the home appliances **38** and **38'** correspond to

the serial input/output format and the contact input/output format, respectively.

See Applicants' disclosure, pg. 55, line 7 - pg. 56, line 7. When read in light of the specification, Applicants' submit that the scope of claim phrase "corresponding input/output format" is clearly evident.

MPEP §2173.02, provides that "[i]f one skilled in the art is able to ascertain in the contested claim terms or phrases in light of the specification, then 35 U.S.C. 112, second paragraph, is satisfied. If upon review of the claim as a whole in light of the specification, the examiner determines that a rejection under 35 U.S.C. 112, second paragraph, is not appropriate in the above-noted example, but is of the opinion that the clarity and the precision of the language can be improved by the deletion of the contested phrase in the claim, the examiner may make such a suggestion to the applicant. If applicant does not accept the examiner's suggestion, the examiner should not pursue the issue." Eighth ed. August 2007, Rev. 7.

The phrase "corresponding input/output format" defines the particular aspect or feature of the claimed embodiment with clarity and precision, as the claim language is clearly supported in the specification. As a result, Applicants' believe that the contested phrase suitably apprises one of ordinary skill the scope for which Applicants' seek protection. Therefore, based on Applicants' disclosure and current patent practice under 35 U.S.C. §112, second paragraph, it is believed that the claimed phrase "corresponding input/output format" is definite. Withdrawal of this rejection, therefore, is requested.

Rejections Under 35 U.S.C. §103

Claims 1-3 and 5-11 are rejected under 35 U.S.C. §103(a) for alleged unpatentability over *Howard et al.* (US 6728804) in view of *Van der Meulen* (US 6906617) and further in view of *Abdulkarim* (US 2003/0088796). Applicants respectfully traverse this rejection.

Independent claim 1 recites, among other features an apparatus communication managing means that includes the following:

- an apparatus interface access unit that interfaces with the communication control means according to a procedure common to the connection object apparatuses;
- an apparatus control access unit that interfaces with the communication control means according to the common procedure;
- first access control means that controls access to the apparatus interface access unit based on an operation of the communication control means; and
- second access control means that controls access to the apparatus control access unit based on an operation of the apparatus interface means.

As stated in Applicants' previous response, *Howard* discloses that the communications adaptor includes a communications module that handles communications over the communications port and over the communications network. When communication is established between the adapter and the electronic *device*, the device is serviced, controlled, or monitored through via the adapter. See Howard, pgph bridging cols. 4 and 5; and pgph bridging cols. 6 and 7.

Based on the above, one of ordinary skill would understand that *Howard* discloses the controlling of an electronic device through the communications adapter. *Howard*, however, does not disclose or suggest a component or technique of controlling access to an apparatus interface access unit and a component or feature that controls access to an apparatus control unit as recited in the claims.

On page 2 of the Office Action, the Examiner alleges that it is inherent that the adapter permits [another device] access [to stored information] and that a firewall or filter can be used to prohibit access. Even assuming that the Examiner's position is reasonable, which Applicants do not acquiesce that it is, nothing in *Howard* discloses or suggest that access to the apparatus access unit is controlled based on an operation of a communication control means and access to an apparatus control access unit is based on an operation of an apparatus interface means, as recited in Applicants claims. Stated differently, *Howard* when viewed individually or with any other prior art of record or knowledge of one of ordinary skill does not disclose or suggest a communication control means that performs an operation to control access to an apparatus interface access unit and an apparatus interface means that performs an operation to control access to an apparatus control access unit as recited in claim 1.

The Examiner acknowledges that *Howard* fails to disclose or suggest power supply managing means for managing a state of power supply of a communication adapter apparatus, and controls an operation of at least one of the communication control means, and relies on *Van der Meulen* and *Abdulkarim* to remedy these deficiencies. Upon careful analysis, however, neither of the secondary references discloses or suggests features that when combined with *Howard* achieves Applicants' claimed first and second access control means.

In summary, *Howard*, *Van der Meulen*, and *Abdulkarim* when applied individually or collectively as alleged, fail to disclose or suggest every feature and/or the combination of features recited in Applicants' claims. The courts have established that the USPTO has the initial burden of establishing a **factual basis** to

support the legal conclusion of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). For rejections under 35 U.S.C. § 103(a) based upon a combination of prior art elements, in KSR Int'l v. Teleflex Inc., 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007), the Supreme Court stated that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some **articulated reasoning with some rational underpinning** to support the legal conclusion of obviousness." In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (emphasis added). For at least the foregoing reasons, withdrawal of this rejection is respectfully requested.

Claim 12 is rejected under 35 U.S.C. §103(a) for alleged unpatentability over *Howard* in view of *Fritsche et al.* (US 65670076), claim 13 is rejected under 35 U.S.C. §103 for alleged unpatentability over *Howard* and *Fritsche* in view of *Van der Meulen*, and claims 14-16 stand rejected under 35 U.S.C. §103 for alleged unpatentability over *Howard* in view of *Van der Meulen*. Applicants respectfully traverse these rejections.

Each of independent claims 12-16 recite among other features, selecting driver software corresponding to the input/output format of the second input/output interface of the home appliance based on the supplied voltage information and executing the driver software to read attribute information from the home appliance (claim 12); selecting driver software of the serial input/output format having one of the synchronous or asynchronous clock and executing the driver software to read attribute information from the home appliance (claim 13); the communication adapter

executes at least one of the plural pieces of driver software to read attribute information from each of plural home appliances, the storage device holds the attribute information consisting of items, model names, and power consumption (claim 14); the communication adapter executes at least one of the plural pieces of driver software to read attribute information from each of plural home appliances, the storage device holds the attribute information consisting of items, model names, and power consumption (claim 15); and the communication adapter executes at least one of the plural pieces of driver software to read attribute information from each of plural home appliances, the storage device holds the attribute information consisting of items, model names, and power consumption (claim 16).

In numbered paragraph 4 on page 3 of the Office Action, Examiner alleges that because *Fritsche* teaches the identification of a device based on voltage, the input/output format is also selected. Applicants disagree.

Fritsche discloses a method of using an evaluation unit to identify an electrical component through a voltage measurement, so that the type of device can be displayed at an output unit or transmitted to a further central processor Fritsche, Abstract, col. 2, lines 5-10, and 22-44. This reference, however, does not disclose or suggest the selection of an input/output format based on the voltage information and the execution of driver software to read attribute information from the home appliance. In other words, the identification of the input/output format is used by the communication adapter to identify the home appliance by reading out attribute information of the home appliance. The attribute information is used to identify and control the home appliance.

Fritsche, on the other hand, discloses that the detected voltage is used to identify the electrical component. There is no disclosure or suggestion of based on the detected voltage, selecting driver software corresponding to the input/output format of the second input/output interface of the home appliance based on the supplied voltage information, and executing the driver software to read attribute information from the home appliance. Accordingly, *Fritsche* does not remedy the deficiencies of *Howard*.

Because the combination of *Howard*, *Van der Meulen*, and *Fritsche* fail to disclose every element and/or the combination of elements recited in Applicants' claims, Applicants respectfully submit that a *prima facie* case of obviousness has not been established. Withdrawal of these rejections, therefore is respectfully requested.

Conclusion

Based on at least the foregoing amendments and remarks, Applicants submit that claims 1-3 and 5-16 are allowable, and that this application is in condition for allowance. Accordingly, Applicants request a favorable examination and consideration of the instant application. In the event the instant application can be placed in even better form, Applicants request that the undersigned attorney be contacted at the number below.

Respectfully submitted,

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